

order to more clearly convey that point, a brief summary of *Cohen* follows hereinafter, followed by a summary of the application. At first blush, the *Cohen* reference may seem to teach something similar to what is recited in the pending claims—after all, both appear to relate to networks, and to network address translation. But as will be seen, that's really as far as the similarities go.

Cohen

The *Cohen* reference relates to the retrieval of network content, and more specifically teaches a system for serving network content from a proxy cache, rather than directly from the original hosting server. The details of this technique are set forth in *Cohen* as follows. First, a client sends a logical URL which is translated to an associated IP address via a DNS. *See Cohen*, col. 6, lines 47-60. Once the IP address of the relevant server is determined, a redirector transparently establishes a connection between the client and a proxy cache instead of establishing a connection directly to the requested server at the determined IP address.

See Cohen, col. 7, lines 12-17. If the requested information is found in the cache, then a copy of that information is transparently returned to the requesting client, i.e. the client *thinks* it is connected to the requested server itself, but it is actually connected to the proxy cache.

See Cohen, col. 7, lines 17-18. Note that a connection was never actually established to the requested server to provide the requested information.

In the situation where the proxy cache does not contain the requested information, a separate connection is established between the proxy cache and the requested server to obtain a copy of the requested information. *See Cohen*, col. 7, lines 27-31. Once the proxy cache

has obtained a copy of the requested information from the requested server over the separate connection, the copy is forwarded to the client over the original connection between the client and the proxy cache. *See Cohen*, col. 7, lines 31-35. Again, note that a connection was not actually established to the requested server to provide the requested information, but that the requested information is still provided in any case.

In summary, it can be seen that *Cohen* really has nothing to do with controlling access to a requested resource. The salient technical features of *Cohen* are as follows: a request for information is made, the request being addressed to a destination server. The request is *always* redirected and is *always* fulfilled, i.e. it is fulfilled by the proxy cache regardless of whether the proxy already has the information or must itself obtain the information from elsewhere.

The Present Application

In contrast to the *Cohen* reference, the present application relates to *controlling* the access of a client to a requested resource. In particular, the described process provides a technique for network access control. *See Application*, page 3, lines 21-23. First, when a client sends handshake packets intended for the target server to a gateway or other shared connection, the gateway redirects the handshake packets to an access control server by rewriting the packet destination address. *See Application*, page 4, lines 3-6. The access control server determines whether the client should have access to the requested resource and sends a response back to the gateway instructing the gateway to either allow or disallow

access of the client to the resource on the target server. *See Application, page 4, lines 6-8.* If access is allowed, then a session between the client and the target server is instantiated and all subsequent packets in that session are simply inspected on the fly by the gateway to determine when a connection to a different destination is attempted. *See Application, page 4, lines 8-10.*

In summary, with respect to the technique described in the present application, an access control server receives initially redirected communications, and uses them to instruct a gateway to either allow or disallow a connection between the requesting client and the target server. Note that the client does *not* always get access to the requested resource, but rather only gains access if the access control server indicates such to be permissible. This summary of certain aspects of the description is presented for the reader's convenience. However, since it is the claims and not the specification that describe the bounds of the invention, the claims will be discussed in greater detail below in the context of the currently pending rejections.

The Anticipation Rejections: Claims 1-6, 8-13, 15-22, 24-29, 31 and 32

As noted above, a claim cannot be rejected under § 102 when the cited reference fails to teach each element of the claim. Such is the case here. Pending claim 1 is presented below for convenience so that it may be seen that the recited elements are simply missing from the cited reference, *Cohen*:

A method of controlling access to a desired resource hosted on a destination server, comprising the steps of:

- (a) receiving handshaking packets from a client machine intended to begin a session with the destination server;
- (b) redirecting network communications, including the steps of:
 - redirecting the handshaking packets by rewriting the destination address in the handshaking packets' IP headers to route the packets to an access controlling web server;
 - receiving a content request packet from the client machine destined for the destination server intended to retrieve the desired resource from the destination server; and
 - redirecting the content request packet by rewriting the destination address in the packet IP header to route the packet to the access controlling web server;
- (c) receiving a response from the access controlling web server; and
- (d) controlling access of the client machine to the desired resource based on the response from the access controlling web server.

The Office action appears to focus on elements (a) and (b), while ignoring the manifest absence in *Cohen* of elements (c) and (d). In particular, while *Cohen* arguably discusses (a) receiving handshaking packets, and (b) redirecting network communications,¹ it clearly *does not* discuss (c) receiving a response from the access controlling web server and (d) controlling access of the client machine to the desired resource based on that response.

After all, as discussed above, *Cohen* does not control access at all – access is always granted, in the sense that the requested material is delivered transparently to the client. The only question is whether the proxy cache already has the requested information or whether it needs to get that information elsewhere.

This difference is not inconsequential. Suppose a young child surfing the Web accidentally activates a link to a pornographic Web site. *Cohen* will proceed to serve that pornographic material to the child, the only question being whether the proxy cache has the material already or alternatively needs to obtain it before forwarding it to the child's

machine. In contrast, the present invention, as claimed, does not simply decide where to get a certain item, but rather *controls access* to the requested resource! Thus, the present invention would allow the child to be *denied* access to the pornographic material via the response from the access controlling web server, as recited in elements (c) and (d).

Because the cited reference lacks any teaching with respect to at least a number of the expressly recited elements of claim 1 as discussed above, it is respectfully submitted that a *prima facie* case of anticipation has not, and cannot, be presented based on the cited reference. It is accordingly requested that the rejection of claim 1 be reconsidered and withdrawn.

With respect to independent claim 17, this claim is a computer-readable medium claim that is related to claim 1. It is submitted that, for essentially the same reasons, *Cohen* does not anticipate claim 17. In particular, claim 17 recites a computer-readable medium having thereon computer-executable instructions for performing a number of steps including (1) receiving a response from an access controlling web server, and (2) controlling access of a client machine to a desired resource based on the response from the access controlling web server. As noted above, *Cohen* does not pertain to access control and simply fails to teach at least these limitations. It is accordingly requested that the rejection of claim 17 be reconsidered and withdrawn.

¹ This summary is meant only to indicate that *Cohen* generally discusses these topics, not that the exact claim limitations recited are taught by *Cohen*.

For the reasons stated above, it is further respectfully submitted that the rejected dependent claims, i.e. claims 2-6, 8-13, 15-16, 18-22, 24-29, and 31-32 are patentable as well, and it is requested that the rejections of these claims also be reconsidered and withdrawn for the same reasons. Moreover, many of these claims clearly recite additional limitations that are also absent from the teachings of *Cohen*. For example, claims 2 and 18 contain recitations related to establishing a connection between the client machine and the destination server. Of course, as discussed above, the technique of *Cohen* never establishes such a connection. Rather, it is the proxy cache that connects to the server if any connection is made at all (i.e. if the proxy itself lacks the requested materials). Moreover, as a further example, claims 4-6, 8-9, 20-22, and 24-25 pertain to deciding whether access to a resource is allowable or not based on recognition of a URL. Since *Cohen* never determines whether or not access to a resource is allowable, it is clear that *Cohen* does not teach the recited claim aspect. For all of these reasons, claims 2-6, 8-13, 15-16, 18-22, 24-29, and 31-32 are patentable, and it is requested that the rejections of these claims be reconsidered and withdrawn.

The Obviousness Rejections: Claims 7, 14, 23, and 30²

As with a rejection under § 102, a rejection under § 103 must be premised on the identification in the cited references of all elements of the targeted claim, as well as an

² The additional reference, *Chung*, is used to supply the element of an embedded identity token in a GET URL packet.

identification of a teaching to combine the references in the recited manner, and an expectation of success in so doing. Although it is respectfully submitted that no real teaching to combine or expectation of success have been cited or are apparent, it is equally clear that the references, even when combined in the recited manner, do not teach all elements of any of claims 7, 14, 23, or 30.

Each of these claims is dependent upon either claim 1 or 17. For the reasons stated above, it is believed that the base claims are patentable, and for the same reasons the independent claims are also patentable. Moreover, the claims recite additional limitations that are not found in the cited art. For example, claims 7 and 23 pertain to deciding whether or not access to a resource is allowable based on recognition of a URL. As discussed above, *Cohen* does not determine whether or not access to a resource is allowable at all, and so *Cohen* fails as well to teach this additional recited claim limitation. For all of these reasons, claims 7, 14, 23, and 30 are not obvious in view of the cited art, and it is requested that the rejections of these claims be reconsidered and withdrawn.

The Drawings

Applicants note the Notice of Draftsperson's Drawing Review accompanying the subject Office action. It is respectfully requested that submission of formalized drawings be deferred pending notice of allowance.

In re Appln. of Lamb et al.
Serial No. 09/489,629

Conclusion

The application is considered to be in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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